

Thursday, June 25, 2020

Attn: Ms. Jennifer Atkins AECOM 250 Apollo Drive Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500

SDG ID: GCG18481

Sample ID#s: CG18481 - CG18483

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #M-CT007 ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530

RI Lab Registration #63

UT Lab Registration #CT00007 VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

June 25, 2020

SDG I.D.: GCG18481

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CG18481	SW DISCHARGE
TRIP BLANK 1	CG18482	SW DISCHARGE
TRIP BLANK 2	CG18483	SW DISCHARGE



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Analysis Report

June 25, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample InformationCustody InformationDateTimeMatrix:SW DISCHARGECollected by:06/19/2013:50Location Code:AECOME-GULFReceived by:CP06/22/2014:20

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#: 112185

aboratory Data SDG ID: GCG18481

Phoenix ID: CG18481

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: OUTFALL 003

Development	Danult	RL/	Lleite	Dilentian	Data/Tima	Dec	Defenses
Parameter	Result	PQL	Units	Dilution	Date/Time	Ву	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	06/24/20	MSF	EPA 1664
pH	8.00	1.00	pH Units	1	06/22/20 19:43	AP	SM4500-H B-11
Total Suspended Solids	24	3.3	mg/L	0.7	06/23/20	EP/ARG	SM 2540D-11
Semi-Volatile Extraction	Completed				06/23/20	AT/AK	SW3520C
Aromatic Volatiles w/N	<u>apthalene</u>						
Benzene	ND	1.0	ug/L	1	06/22/20	MH	E624.1
Naphthalene	ND	1.0	ug/L	1	06/22/20	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	105		%	1	06/22/20	MH	70 - 130 %
% Bromofluorobenzene	93		%	1	06/22/20	MH	70 - 130 %
% Dibromofluoromethane	101		%	1	06/22/20	MH	70 - 130 %
% Toluene-d8	101		%	1	06/22/20	MH	70 - 130 %
Semivolatiles by SIM, F	PAH						
Benzo(a)pyrene	ND	0.10	ug/L	1	06/24/20	WB	E625.1
Naphthalene	ND	0.53	ug/L	1	06/24/20	WB	E625.1
QA/QC Surrogates							
% 2-Fluorobiphenyl	48		%	1	06/24/20	WB	40 - 140 %
% Nitrobenzene-d5	62		%	1	06/24/20	WB	40 - 140 %
% Terphenyl-d14	45		%	1	06/24/20	WB	40 - 140 %

Project ID: GULF CHELSEA TERMINAL 60597375-0500 Phoenix I.D.: CG18481

Client ID: OUTFALL 003

RL/

Parameter Result PQL Units Dilution Date/Time By

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time

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Phyllis Shiller, Laboratory Director

June 25, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Analysis Report

June 25, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

<u>Sample Information</u> <u>Custody Information</u> <u>Date</u> <u>Time</u>

Matrix: SW DISCHARGE Collected by: 06/19/20

Location Code: AECOME-GULF Received by: CP 06/22/20 14:20

Rush Request: Standard Analyzed by: see "By" below

P.O.#: 112185 Laboratory Data SDG ID: GCG18481

Phoenix ID: CG18482

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: TRIP BLANK 1

RL/ Parameter Result **PQL** Units Dilution Date/Time Βv Reference Aromatic Volatiles w/Napthalene 1.0 06/22/20 MH E624.1 Benzene ug/L ND 06/22/20 E624.1 Naphthalene 1.0 ug/L MH **QA/QC Surrogates** % 1,2-dichlorobenzene-d4 102 % 06/22/20 MH 70 - 130 % % Bromofluorobenzene 94 % 1 06/22/20 MH 70 - 130 % 06/22/20 70 - 130 % % Dibromofluoromethane 101 % 1 MH % Toluene-d8 102 06/22/20 МН 70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director

June 25, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Analysis Report

June 25, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

<u>Sample Information</u> <u>Custody Information</u> <u>Date</u> <u>Time</u>

Matrix: SW DISCHARGE Collected by: 06/19/20

Location Code: AECOME-GULF Received by: CP 06/22/20 14:20

Rush Request: Standard Analyzed by: see "By" below

P.O.#: 112185 Laboratory Data SDG ID: GCG18481

Phoenix ID: CG18483

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: TRIP BLANK 2

RL/ Parameter Result **PQL** Units Dilution Date/Time Βv Reference Aromatic Volatiles w/Napthalene ND 1.0 06/22/20 MH E624.1 Benzene ug/L ND 06/22/20 E624.1 Naphthalene 1.0 ug/L MH **QA/QC Surrogates** % 1,2-dichlorobenzene-d4 103 % 06/22/20 MH 70 - 130 % % Bromofluorobenzene 94 % 1 06/22/20 MH 70 - 130 % 06/22/20 70 - 130 % % Dibromofluoromethane 103 % 1 MH % Toluene-d8 101 06/22/20 МН 70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director

June 25, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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QA/QC Report

June 25, 2020

QA/QC Data

SDG I.D.: GCG18481

RPD Sample Dup Dup LCS LCSD LCS MS MSD MS Rec Blank RL Result Result RPD % **RPD** % % **RPD** Limits Limits Parameter % QA/QC Batch 534607 (pH), QC Sample No: CG18316 (CG18481) 7.36 7.28 99.2 рΗ 1.10 85 - 115 20 Comment: Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%. QA/QC Batch 534638 (mg/L), QC Sample No: CG18441 (CG18481) 85 - 115 **Total Suspended Solids** BRL 2.5 <3.3 94.0 QA/QC Batch 534797 (mg/L), QC Sample No: CG19016 (CG18481) Oil and Grease by EPA 1664A BRL 85 - 115 20 1.4 97.0 96.0 1.0 Comment: Additional: MS acceptance range 75-125%.



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QA/QC Report

June 25, 2020

%

%

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Rec Limits	RPD Limits	
QA/QC Batch 534682 (ug/L), Q0	C Samp	le No: CG18359 (CG18481)									
Semivolatiles by SIM, PAI	H										
Benzo(a)pyrene	 ND	0.02	61	78	24.5				40 - 140	20	r
Naphthalene	ND	0.50	44	53	18.6				40 - 140	20	
% 2-Fluorobiphenyl	48	%	51	53	3.8				40 - 140	20	
% Nitrobenzene-d5	50	%	50	55	9.5				40 - 140	20	
% Terphenyl-d14	76	%	64	71	10.4				40 - 140	20	
Comment:											
Additional 8270 criteria: 10% of co acceptance range for aqueous sar		s can be outside of acceptance criter 0-110%, for soils 30-130%)	ia as lor	ng as rec	overy is	at least	10%. (Ad	id surro	ogates		
QA/QC Batch 534678 (ug/L), Q	C Samp	le No: CG18482 (CG18481, CG	18482,	CG1848	33)						
Volatiles											
Benzene	ND	0.70	112	109	2.7	110	112	1.8	65 - 135	20	
Naphthalene	ND	1.0	130	124	4.7	121	127	4.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	101	%	99	99	0.0	99	99	0.0	70 - 130	30	
% Bromofluorobenzene	94	%	100	101	1.0	101	99	2.0	70 - 130	30	
% Dibromofluoromethane	100	%	100	98	2.0	101	99	2.0	70 - 130	30	
% Toluene-d8	99	%	100	100	0.0	97	98	1.0	70 - 130	30	
Comment:											
A blank MS/MSD was analyzed wi	th this ba	atch.									

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

June 25, 2020

Thursday, June 25, 2020

Sample Criteria Exceedances Report GCG18481 - AECOME-GULF

Criteria: None State: MA

RL Analysis SampNo Acode Phoenix Analyte Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



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Analysis Comments

June 25, 2020 SDG I.D.: GCG18481

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes No Coolant: IPK ICE No Temp ° C Pg of	Data Delivery/Contact Options:	1-978-905-2112 jennifer.atkins@aecom.com	Project P.O: 112185	This section MUST be	completed with	Bottle Quantities. ↓ ↓ ↓ ↓ ↓	Liggi Pocific	too lines	CONIL DO CATA CO								MA Data Format MA Description Excel		EQUIS	Data Package Tier II Checklist	S-3	MA . SURCHARGE APPLIES
	Fax	Phone:	Proj		***************************************		OSA,	1016 19161	0740 03	3	-							ection GW-1		lity S-1		collected:
	7T 06040	823	0597375-0500					10 C.	STOS TO								Sure RCP Cert	GW Protection	GA Mobility	GB Mobility Residential DEC	☐ I/C DEC	State where samples were collected:
CHAIN OF CUSTODY RECORD	587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040	Fax (860) 645-0823 0) 645-8726	Project: Gulf Chelsea Terminal / 60597375-0500	fer Atkins	OM	19RM		RING WA	SINOS SINOS								RI Direct Exposure	(Residential)	Other	×	~	State wher
OF CUSTO	mpike, P.O. Box 3	Email: info@phoenixlabs.com F Client Services (860)	oject: Gulf Che	Report to: Jennifer Atkins	Invoice to: AECOM	QUOTE # AE012319RM	Analysis Populast		240 345 SE	× ×	\vdash	メ					20,24 (1.4	21 HA	1 alal		2 Days: 56 mg	☐ Other SURCHARGE APPLIES
CHAIN	East Middle Tu	Email: info@p Client	ď	~ 	<u>=</u>	ð 	3		Time Sampled	×							Date:	1123	AW M	Turnaround:	<u>ф</u>	· sur
	587						tion Date: 6-17	WW=Waste Wate d W=Wipe OIL	Date Sampled Sa	-3								0 1 7 1	WWK		3 Det	
		s, Inc.			-		on - Identifica	Surface Water Soil SD=Soli	Sample Matrix	MS.							ον: -	11 11	MAK	£O.	, 40, L	_,
	HINIX W	Environmental Laboratories,	AECOM	250 Apollo Drive	Chelmsford, MA 01824	Jennifer Atkins	Client Sample - Information - Identification	Matrix Code: DW=Dmining Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Soild W=Wipe OIL=Oil B=Bulk L=Liquid	Customer Sample Identification	Outfall 003	Trip Blant 1	Tr.961-167	***************************************				Accepted by			Comments, Special Requirements or Regulatid	155 rul	
	FE	Environme	Customer: /	Address: 2	-1	- 1	Sampler's Signature	Matrix Code: DW=Drinking Water RW=Raw Water SE: B=Bulk L=Liquid	PHOENIX USE ONLY SAMPLE #	18481	83 JUST	184,83					Relinquished by:	# 2		Comments, Special	Please	